

A NEW PLANT BUG FROM PERU, WITH NOTE ON A NEW GENUS
FROM NORTH AMERICA (Miridae: Hemiptera)

By TSAI-YU HSIAO

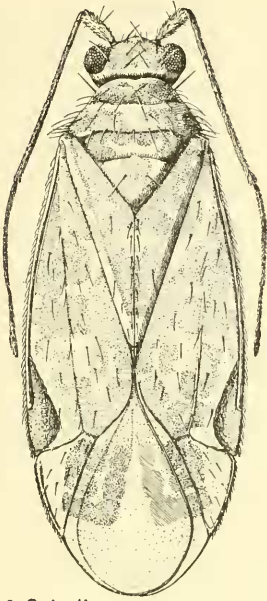
Through the courtesy of Dr. R. I. Sailer of the Bureau of Entomology and Plant Quarantine, U. S. Department of Agriculture, I have had the opportunity of studying a series of mirid specimens from Peru. These specimens are of particular interest because of the peculiar antennae of the males. The abnormality of antennae is generally rare among the Miridae, especially in the subfamily Orthotylinae to which this series belongs. A careful study of the literature reveals no description of such an antennal structure as is possessed by the specimens at hand. In 1907, Reuter established the genus *Hyalochloria* with two species, *H. caviceps* and *H. unicolor* from Jamaica (Ofv. Fink. Vet. Soc. Forh., 49 (5): 18). Both species were described from female specimens. According to the female characters the present series should belong to this genus. The male antennal structure is undoubtedly a generic character with possible specific variations. In 1916, Van Duzee described a third species, *Hyalochloria bella*, from California (Univ. Calif. Publ., Div. Ent. Tech. Bul. 1 (4) : 218), based on one male and four females, without mentioning any unusual character of the antennae. The assumption therefore follows that *H. bella* V. D. is either not congeneric with *Hyalochloria* or that the present series represents an undescribed genus. Through Dr. Sailer's effort I have had the opportunity of examining one female specimen of *caviceps* (collected from the type locality) and four female specimens of *bella* (collected from San Bernardino Co., Calif., a county neighboring the type locality) borrowed from the California Academy of Science. Although no male of either species is available at the present time it can be definitely stated that the Peruvian series belongs to a new species of *Hyalochloria* and that *H. bella* Van Duzee represents a new genus, both of which are herewith described. I wish to acknowledge my indebtedness to Mr. Arthur D. Cushman of the Bureau of Entomology and Plant Quarantine, U. S. Department of Agriculture, for the execution of the accompanying illustrations.

***Hyalochloria denticornis*, new species**

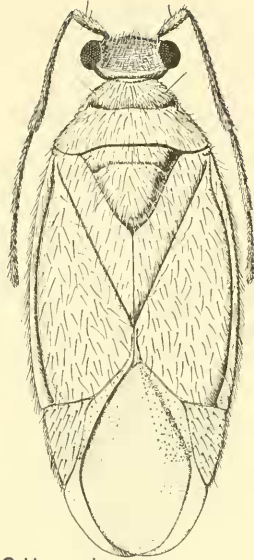
(Figs. 3 and 4)

Male.—Body ovate, length 2.6 mm., width 1.25 mm., semi-translucent, stramineous with dark markings, clothed all over with long simple concolorous pubescence.

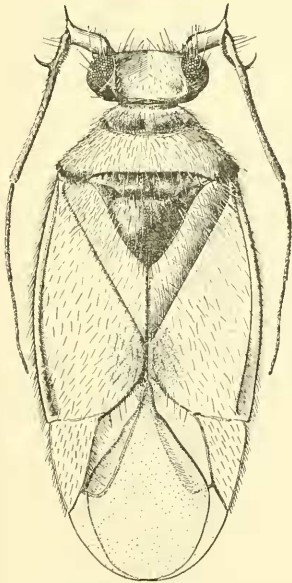
Head vertical, broad, width across eyes 0.65 mm., length seen from above 0.14 mm., height at base seen from side 0.3 mm. Vertex and frons broadly



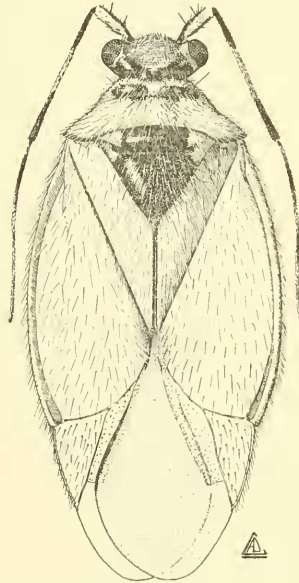
1 *S. bella*



2 *H. caviceps*



3 *H. denticornis* ♂



4 *H. denticornis* ♀

and conspicuously excavated between eyes, width of vertex 0.37 mm., narrowly but distinctly marginate. Clypeus moderately prominent, curved backward apically, base placed on a straight line between bases of antennae, absoletely discrete from frons; jugum and lorum discrete; gena high, about one-half as high as the eye seen from side; gula approximately one-third the length of bucculae. Eyes seen from above small, removed from apex of pronotum, forming a collum behind them, seen from the side large, vertically reniformed, occupying about two-thirds of the height of head, covered sparingly with long simple hairs; collum dark brown excepting the parts behind the eyes, gradually narrowed posteriorly. Rostrum long, length 1 mm., reaching middle of abdomen, apical fourth brownish, segment I distinctly thickened, slightly surpassing base of head.

Antennae moderately thick and long, inserted at apex of interior margin of eye, length of segments, I : II : III : IV = 0.25 mm. : 0.88 mm. : 0.5 mm. : 0.5 mm.; segment I sparingly clothed with simple pubescence intermixed with a few long hairs, incrassate at basal portion, dark at base, with a long stout apical spine on latero-dorsal side, spine placed on a long basal tubercle, about as long as segment is thick, dark brown; segment II clothed more densely with simple hairs than I, intermixed with long hairs only at basal fourth where impressed with two longitudinal grooves, one along the inner latero-ventral side and the other along the outer latero-ventral side, thus forming three longitudinal ridges each armed with a row of small black teeth (the outer row is doubled); a long, apically curved spine located between the distal ends of the inner and middle ridges; spine slenderer but longer than that on segment I, dark brown; the portion of segment beyond base of spine broadly and distinctly curved, apical portion darkened; segments III and IV more slender, dark brown. The prominent spines on segments I and II are actually composed of several strengthened or spine-like hairs fused to form a single mass.

Pronotum transverse, declivent anteriorly, length 0.32 mm., width at base 0.92 mm., at apex 0.36 mm., lateral margins slightly sinuate behind middle, posterior margin strongly sinuate before scutellum, humeral angles rounded, calli distinct, confluent, with a distinct transverse impressed line separating them from posterior disk of pronotum, apical collar absent; apex of pronotum narrowly, posterior portion of calli, and posterior margin of humeral angles dark brown. Mesonotum broadly exposed, dark brown excepting lateral margins. Scutellum dark brown, distinctly convex, length 0.37 mm., width at base 0.42 mm. (both measurements not including mesonotum).

Hemelytra explanate, semitranslucent, reaching apex of abdomen at apex of commissure; embolium slightly broadened posteriorly, embolial margins distinctly convex, length 0.5 mm.; commissure narrowly dark brown, inner apical angle of corium tinged with brownish; cuneus declivent, length 0.46 mm., width at base 0.41 mm., fracture distinct; membrane transparent, finely rugulose, inner margin narrowly brown, major areole coriaceous as cuneus, minor areole obsolete.

Nyphus concave medially; ostiolar peritreme conspicuous, whitish. Right paramere of genitalia leaf-like, gradually narrowed toward apex and ending in a small hook; left paramere slender, broadly curved, thickened at base and pointed at apex.

Legs moderately long, posterior femora 1 mm. in length with several rows of distinct spinules along basal portion; posterior tibiae 1.37 mm. in length with three or four long spinules at basal portion, distinct from general pubescence. Arolia conspicuous, convergent at apex.

Female.—Similar to male in coloration, pubescence and general appearance, but strikingly different from it in the following features: Antennae normal, without armature; head and vertex much narrower; and posterior femora with only scattered long pubescence, posterior tibiae devoid of basal spinules as described for male. Vertex excepting posterior margin pale, inner side of antennal segment I and base and apex of II brown.

Body, length 2.45 mm., width 1.23 mm.; head, width across eyes 0.58 mm., length seen from above 0.13 mm., height at base seen from side 0.26 mm., width of vertex 0.29 mm. Length of antennal segments, I : II : III : IV = 0.21 mm. : 0.71 mm. : 0.46 mm. : 0.45 mm. Pronotum, length 0.3 mm., width at base 0.92 mm., at apex 0.36 mm.

Types.—U. S. National Museum No. 57196; holotype, male; allotype, female; paratypes, 11 males and 7 females, Lima, Peru—on leaves of cotton and beans infested with *Empoasca*.—November, 1943 (Wille-Bezerra). Nine females, from Caffete, Peru—on cotton—February 11, 1941 (E. J. Hambleton). Three females, from Lima, Peru, March 28, 1940.

Closely related to *H. caviceps* Reuter (Fig. 2) but the female differs from that of *caviceps* by the longer second antennal segment, absence of spinules on posterior tibiae, different coloration, and in the more pronounced curvature of the costal margin of the hemelytra.

SAILERIA, new genus

Allied to *Diaphnidia* Uhler, 1895 (type: *D. debilis* Uhler, 1895), but differing in the following characters: Head vertical, with vertex wider and shallowly excavate, frons strongly convex and eyes farther removed from apex of pronotum; rostrum distinctly exceeding the middle coxae; pronotum with posterior margin strongly sinuate before scutellum, distinctly transversely impressed behind calli, anterior lobe subequal in length to posterior; membranal cells coriaceous; legs proportionally shorter. It is readily distinguished from *Hyalochloria* Reuter, 1907 (type: *H. caviceps* Reuter, 1907) by the characters as follows: Head with vertex only shallowly depressed and frons for most part distinctly convex (in *Hyalochloria* both vertex and frons, excepting the anterior margin of the latter, are distinctly and broadly excavate), posterior margin of vertex less defined; clypeus separated from frons with deep broad impression; collum shorter, measured from side less than half as long as eye (in *Hyalochloria* it is distinctly more than half as long as eye); eyes seen from above larger; male antennae normal; scutellum not convex; hemelytra less explanate, with costal margins nearly parallel and embolium incomplete.

Genotype: *Hyalochloria bella* Van Duzee, 1916 (Fig. 1).

This genus is named in honor of Dr. R. I. Sailer in appreciation of his kind help in this work.